**Carfil® 9233**

Aqueous Modified Polyurethane Dispersion

**Technical Data Sheet**

Name: Carfil® 9233

Revision Date: 2019-08-12

NO. WHSM_9233

Version: 1.5

**Product Description**

INCI Name: Polyurethane-2 and Polymethyl methacrylate

Carfil® 9233 is a product of polyurethane and polymethyl methacrylate dispersion. It functions as a film former for personal care products such as peelable water-based nail polish and decorative cosmetics. Carfil 9233 is a low VOC product and is free of monomers and formaldehyde. Carfil 9233 is easy to use, especially suitable for cold processes. The product also shows good compatibility with a broad range of cosmetic ingredients. Preservative: phenoxyethanol 13000-15000 ppm. The effects of other substances and pH values on the inactivation of preservative should be noted.

**Properties**

1. Excellent gloss and good film-formation
2. Good water resistance and wear properties

**Characteristic data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Unit</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Transparent to translucent liquid</td>
<td></td>
<td>Visual</td>
</tr>
<tr>
<td>Solids</td>
<td>39-41</td>
<td>wt%</td>
<td>WHPU/T011-571-2017 (5cm 150°C, 20min)</td>
</tr>
<tr>
<td>pH</td>
<td>7.0-9.0</td>
<td></td>
<td>GB/T 6920-1986</td>
</tr>
<tr>
<td>Viscosity(25°C)</td>
<td>≤300</td>
<td>mPa·s</td>
<td>GB/T2794-2013</td>
</tr>
</tbody>
</table>

*These properties are typical but do not constitute specifications.

**Storage**

The product should be stored in dry condition between 5~35°C with the integrity of the packaging, and prevented from direct sunlight. The validity of this product is for 9 months, performance assessment is recommended before use after shelf life. The
Carfil® 9233

product should be protected from freezing during storage. It is suggested to filter before application and use up once the package is open.

**Disclaimer:** Wanhua Chemical Group Co., LTD. recommends that customers should check with Materials Safety Data Sheet (MSDS) for details about safety instructions. We also suggest that you contact the suppliers of other materials used in our recommended formulations and consult appropriate health and safety regulations prior to use. The information contained herein is believed to be reliable. However, nothing in this technical sheet should be considered as a representation of warranty, express or implicit, regarding the product characteristics, application, quality, safety, merchantability or fitness for a particular purpose. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.